TEJUS
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TEST REPORT

Client:	BRUHAT BENGALORE MAHANAGARA PALIKE
Project:	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Consultants:	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor:	Sri. N Lokanath Reddy

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Location/Source	At Site/Plant	Date of Sampling	03.06.19
Period of Soaking	24 hours	Date of Testing	03.06.19

Sl No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	
(A)	Weight of sturated surface dry sample gm.		655	628	644	
(B)	Weight of oven - dry sample gm.		640	615	634	
(C)	Weight of Pycnometer Filled with water gm		1275	1275	1275	
(D)	Weight of Pycnometer + sample + water gm		1680	1685	1682	
(E)	Bulk specific gravity	B / (C + A - D)	2.560	2.821	2.675	**2.685**
(F)	Absorption (%)	(A - B) *100 / B	2.344	2.114	1.577	**2.012**

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Authorised Signatory

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

TEJUS CONSULTANTS
No. 1, Sri Ram Temple, 8th Cross, 1st Stage KHB Colony, Basaveshwaranagar, Bangalore - 560079. O : +91 80 23287532, tejusconsultants@gmail.com

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	20 mm down size	**Proposed Use**	Concrete
Sample Location	Plant/At site	**Date of Sampling**	03.06.19
		Date of Testing	03.06.19

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	288	288	2.88	97.12	95 - 100
10.00 mm	4885	5173	51.73	48.27	25 - 55
4.75 mm	4110	9283	92.83	7.17	0 - 10
Pan	717	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Consultants	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Total Weight:	10000 gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size	Proposed Use	Concrete
Sample Location	At Site/Plant	Date of Sampling	03.06.19
		Date of Testing	03.06.19

IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	564	564	5.64	94.36	90-100
10.0	4680	5244	52.44	47.56	40-85
4.75	4555	9799	97.99	2.01	0-10
Pan	201	10000			

Remarks : Satisfactory / Not Satisfactory

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TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project:	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No:11 Kuvempunagara
Client:	Bruhat Bangalore Mahanagar Palike
Consultant:	TEJUS CONSULTANTS
Contractor:	Sri. N Lokanath Reddy
Grade of concrete:	M20
Size of cube:	150x150x150 mm
Reference Code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	03.06.19	01.07.19	28days	8.130	22500	451	20.04	20.12
2	03.06.19	01.07.19	28days	8.128	22500	453	20.13	
3	03.06.19	01.07.19	28days	8.128	22500	454	20.18	

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Test Report on Cement

Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Sample ID	Cement
Date of Sample Tested	06.05.19
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	39	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	251	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	2.000	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	29.00%	25 % to 35

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Consultants	Tejus Consultants, Bangalore
Contractor	Sri. N Lokanath Reddy

SIEVE ANALYSIS

Total Weight:	3000 gms		
Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Sample Location	At Site/Plant	Date of Sampling	06.05.19
		Date of Testing	06.05.19

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	232	232	7.73	92.27	90 - 100
2.36 mm	300	532	17.73	82.27	75 - 100
1.18 mm	410	942	31.40	68.60	55 - 90
0.600 mm	482	1424	47.47	52.53	35 -59
0.300 mm	710	2134	71.13	28.87	8-30
0.150 mm	625	2759	91.97	8.03	0 - 10
Pan	241	3000			-

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Name	BRUHAT BENGALORE MAHANAGARA PALIKE
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. N Lokanath Reddy

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	**Proposed Use**	concrete
Location/Source	At Site/Plant	**Date of Sampling**	06.05.19
Period of Soaking	24 hours	**Date of Testing**	06.05.19

Sl.No.	Test Property		TRIAL - 1	TRIAL - 2	TRIAL - 3	
A	Weight of sturated surface dry sample gm.		653	681	662	
B	Weight of oven - dry sample gm.		642	670	650	
C	Weight of Pycnometer Filled with water gm		1275	1275	1275	
D	Weight of Pycnometer + sample + water gm		1685	1703	1690	
E	Bulk specific gravity	$\frac{B}{(C+A-D)}$	2.642	2.648	2.632	**2.641**
F	Absorption (%)	$\frac{(A-B)*100}{B}$	1.713	1.642	1.846	**1.734**

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	20 mm down size	**Proposed Use**	Concrete	
Sample Location	Plant/At site	**Date of Sampling**	06.05.19	
		Date of Testing	06.05.19	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	274	274	2.74	97.26	95 - 100
10.00 mm	4850	5124	51.24	48.76	25 - 55
4.75 mm	4225	9349	93.49	6.51	0 - 10
Pan	651	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara	
Consultants	TEJUS CONSULTANTS	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	12.5 mm down size	Proposed Use	Concrete	
Sample Location	At Site/Plant	Date of Sampling	06.05.19	
		Date of Testing	06.05.19	

IS Sieve Size (in mm)	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
20.0	0	0	0	100	100
12.5	541	541	5.41	94.59	90-100
10.0	4625	5166	51.66	48.34	40-85
4.75	4524	9690	96.90	3.10	0-10
Pan	310	10000			

Remarks : Satisfactory / Not Satisfactory

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TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Grade of concrete:	M25
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	06.05.19	13.05.19	7 days	8.300	22500	363	16.13	15.61
2	06.05.19	13.05.19	7 days	8.320	22500	366	16.27	
3	06.05.19	13.05.19	7 days	8.325	22500	325	14.44	

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TEST REPORT ON COMPRESSIVE STRENGTH OF CONCRETE CUBES

Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Grade of concrete:	M25
Size of cube:	150x150x150 mm
Reference IS code:	IS:516-1959

Sl.No.	Date of Casting	Date of testing	Age of Test	Weight of Cube	Area of Cube	Failure load	Compressive strength	Avg. Compressive strength
				Kg	mm^2	KN	N/mm^2	N/mm^2
1	06.05.19	03.06.19	28 days	8.132	22500	572	25.42	25.70
2	06.05.19	03.06.19	28 days	8.140	22500	586	26.04	
3	06.05.19	03.06.19	28 days	8.142	22500	577	25.64	

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Test Report on Cement

Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Client	Bruhat Bangalore Mahanagar Palike
Consultant	TEJUS CONSULTANTS
Contractor	Sri. N Lokanath Reddy
Sample ID	Cement
Date of Sample Tested	14.05.19
Sample Supplied By	Agency

Sl.No.	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 12269-1987
1	a) Initial Setting Time	IS-4031 (Part-5)	39	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part-5)	251	Not More than 600 Minutes
2	Soundness	IS-4031 (Part-3) By the Le-Chatelier method	2.000	Not More than 10 mm
3	Standard Consistency	IS-4031 (Part-4)	29.00%	25 % to 35

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Consultants	Tejus Consultants, Bangalore
Contractor	Sri. N Lokanath Reddy

SIEVE ANALYSIS

Total Weight:	3000 gms		
Type of Material	Fine aggregate (River Sand/ M sand)	Proposed Use	concrete
Sample Location	At Site/Plant	Date of Sampling	14.05.19
		Date of Testing	14.05.19

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing (Zone-II)
10.00 mm	0	0	0	100.00	100
4.75 mm	233	233	7.77	92.23	90 - 100
2.36 mm	306	539	17.97	82.03	75 - 100
1.18 mm	410	949	31.63	68.37	55 - 90
0.600 mm	482	1431	47.70	52.30	35 -59
0.300 mm	710	2141	71.37	28.63	8-30
0.150 mm	625	2766	92.20	7.80	0 - 10
Pan	234	3000			-

Remarks : Satisfactory / Not Satisfactory

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TEST REPORT

Client:	BRUHAT BENGALORE MAHANAGARA PALIKE
Project:	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore
Contractor	Sri. N Lokanath Reddy

SPECIFIC GRAVITY AND WATER ABSORPTION

FINE AGGREGATE (IS-2386-PART-3)

Type of Material	Fine aggregate (River Sand/ M sand)	**Proposed Use**	concrete
Location/Source	At Site/Plant	**Date of Sampling**	14.05.19
Period of Soaking	24 hours	**Date of Testing**	14.05.19

Sl No.	Test Property	TRIAL - 1	TRIAL - 2	TRIAL - 3	
(A)	Weight of sturated surface dry sample gm.	653	685	661	
(B)	Weight of oven - dry sample gm.	642	670	650	
(C)	Weight of Pycnometer Filled with water gm	1275	1275	1275	
(D)	Weight of Pycnometer + sample + water gm	1685	1703	1690	
(E)	Bulk specific gravity $\frac{B}{(C+A-D)}$	2.642	2.607	2.642	**2.630**
(F)	Absorption (%) $\frac{(A-B)*100}{B}$	1.713	2.239	1.692	**1.882**

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TEST REPORT

Clients	Bruhat Bangalore Mahanagara Palike	
Project	Construction of Samudhaya Bhavan at Varadarajanagara and Construction of RO Plant and Drilling of Borewells with Pipeline in Ward No.11 Kuvempunagara	
Consultants	TEJUS CONSULTANTS Basaveshwar Nagar Bangalore	
Contractor	Sri. N Lokanath Reddy	
Total Weight:	10000	gms

SIEVE ANALYSIS

Type of Material	20 mm down size	**Proposed Use**	Concrete	
Sample Location	Plant/At site	**Date of Sampling**	14.05.19	
		Date of Testing	14.05.19	

IS Sieve Size	Weight Retained	Cum. Weight Retained	Cum. % Retained	Cum. % Passing	Spec. Limit (%) Passing
40.00 mm	0	0	0	100	100
20.00 mm	276	276	2.76	97.24	95 - 100
10.00 mm	4850	5126	51.26	48.74	25 - 55
4.75 mm	4225	9351	93.51	6.49	0 - 10
Pan	649	10000			

Remarks : ✓ Satisfactory / Not Satisfactory

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